CHOOSING WELL

Quality of Life on American Indian Lands

It should come as no surprise that American Indians want – and need – many of the same things that other Americans want and need. One of these universal desires is to live a life of quality – to live in accordance with one's own wishes. Solar electricity is playing a part in making these Quality of Life dreams come true.

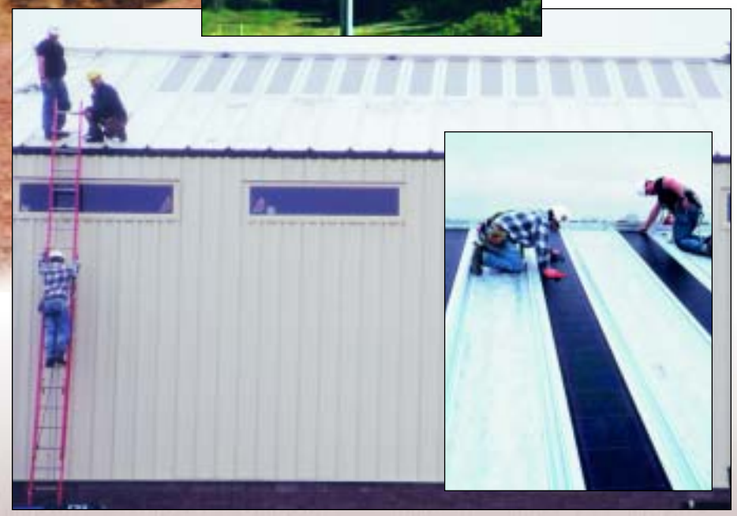
▲ For more than a decade, Torreon/Star Lake Chapter Navajos (New Mexico) have depended upon photovoltaics to provide lights, radio, and television to their remote homes. *(Photo courtesy Sandia National Laboratories)*

▲ Homes along the river on the largely unelectrified Yurok Reservation in northern California take advantage of PV systems as an alternative energy source. Their only other power option, historically, has been generators with very high fuel costs of up to several hundred dollars each month. *(Photo courtesy Sandia National Laboratories)*

▲ A 960W PV array at the Yavapai Apache Day Care Center (Arizona) provides solar backup at the facility – backup to keep lights, computers, and other equipment running when the primary power supply fails. The system is also used as a teaching tool for the community. *(Photos courtesy Direct Global Power, Inc. and Daystar Consulting)*

◀ The quality of life among the Grand Traverse Band of Ottawa and Chippewa Indians (Michigan) is definitely enhanced by solar systems. Power is provided to vital community centers, as well as to homes. *(Photo courtesy Grand Traverse Band of Ottawa and Chippewa Indians)*

◀ The Sherwood Valley Rancheria is located about 15 miles northwest of Willits, California. While only a handful of homes dot the Rancheria, nearly half are powered with solar energy. All of the Sherwood Valley systems were the choice of individual homeowners, and all meet their quality-of-life needs. *(Photo courtesy Sherwood Valley Rancheria)*



▲ Oneida Solar Project contractors install a 2kW standing seam PV system on the roof of the 7,726 square-foot community center for the Oneida Nation. The electricity provided by photovoltaics allows the tribe to conduct its business activities and celebrate its heritage. The building has heat recovery ventilation, is earth bermed, has energy trusses, light sensors, daylighting and energy detailed to keep the fuel bills manageable. *(Photo courtesy Oneida Nation)*

▲ The Manzanita Band of the Kumeyaay Nation (located in southeastern San Diego County, California) has long recognized their abundant solar and wind resources. A 10 kW wind turbine and a 1.2 kW PV array provide power to a community building on the Manzanita Reservation. The DOE-funded demonstration project is being monitored for three years. As part of the project, Manzanita technicians perform ongoing system maintenance and tribal members receive technical training related to wind and solar energy. *(Photo courtesy Manzanita Band of the Kumeyaay Nation)*

"Indian people represent the highest percentage of Americans not connected to the electric grid. Sometimes this is by choice, but those choosing this traditional way of living should not be denied the benefits that electrification can provide – education or refrigeration, for example. Solar electricity allows the best of both these worlds and is in harmony with Indian people's culture. *David Lester, Council of Energy Resource Tribes*

Laguna Majors Ranch

Located nearly a one-hour drive from Interstate Highway 40 in west central New Mexico, the Laguna Pueblo's Majors Ranch is an example of how photovoltaics (and other renewable energy systems) can provide for an enhanced lifestyle in keeping with the Pueblo's values. The 20,000-acre Majors Ranch is being revitalized as a haven for Laguna youths, where the old main ranch house will serve as a retreat. Eventually, the Laguna Pueblo hopes to operate the project as a self-contained community. PV, wind, battery storage, and solar thermal will meet the entire electrical and hot water needs of the buildings. *(Photos courtesy Sacred Power Corporation, Diversified Manufacturing Systems, and U.S. Department of Energy Golden Field Office)*

Lime, an Alaska Native Village

▲ Summer or winter, photovoltaics provides amenities that add to the quality of life in Lime, Alaska. For several years the village has been using a 35kW diesel generator, 24 hours a day, 365 days a year. Installation of the large 12kW array permits the village to shut off the noisy diesel during solar peak hours. Lime residents often comment on the sustained periods of silent power generation that PV allows. *(Photos courtesy Northern Power Systems)* ▼

Salish Kootenai College Provides Public Television

In 1993, television translator K48EG went on-air, providing public television service to the Flathead Indian Reservation and some outlying areas of western Montana. When the local power company wanted more than $50,000 to extend electricity to enlarge the service area, the college instead chose a solar system that was only slightly over half the total cost of conventional power. In the dead of winter, operations are curtailed to no more than six hours a day, but without this solar-powered facility, public television would not be available in some areas of the Flathead Indian Reservation. KSKC-TV is owned and operated by the Salish Kootenai College, a tribal college. *(Photos courtesy Salish Kootenai College Media)*